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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,990	03/31/2004	Mark D. Ackerman	1565.074US1	6083
21186 7590 06/27/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER AHUJA, SUPRIYA	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,990	Applicant(s) ACKERMAN ET AL.	
	Examiner Supriya Ahuja	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/21/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-26 have been examined and rejected in the following office action.

Oath/Declaration

1. The Oath/Declaration is objected to because:

The Oath or Declaration is missing the U.S. Application No. and the Filing Date. The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 602.

Specification

2. The disclosure is objected to because of the following informalities:

- a. The abstract of the disclosure is objected to because the title "Abstract of the Disclose" should be replaced by --Abstract of the Disclosure--. Correction is required.

See MPEP § 608.01(b).

- b. On page 1, remove lines 2-4.

On page 6, line 3, replace the phrase "should me" with --should be --.

Appropriate correction is required.

Claim Objections

3. **Claims 11 and 16** are objected to because of the following informalities:

Regarding Claim 11, line 2, the phrase "the communication port" lacks antecedent basis and therefore should be replaced by --a communication port--, and on line 3, the phrase "the router or switch" should be replaced by --a router or switch--.

Regarding Claim 16, line 3, the phrase "wherein local transparent VPN service" should be replaced by --wherein the local transparent VPN service--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-4 and 6-26** are rejected under 35 U.S.C. 102(b) as being anticipated by Liu (US 6079020 dated 06/20/2000).

6. **As per claim 1**, Liu teaches a method for managing Virtual Private Network (VPN) (method for managing a virtual private network, abstract lines 1-2) communications, comprising: receiving a communication (receiving a command, abstract lines 8-9) from a local client (Headquarters LAN, col. 5 lines 60-64) which is directed to a remote client (remote clients, col. 6 lines 10-12) over an insecure network (private data network such as internet, col. 2 line 17-18, Fig. 1); identifying a VPN associated with the communication (determines which VPN gateways are affected by the command, col. 3 lines 10-12; determines whether or not the source and the

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destination addresses for the data packets are both members of the same VPN group, col. 7 lines 23-31);

translating the communication for delivery within the VPN (translates the command into configuration parameters for virtual private network gateways affected by the command, col. 3 lines 12-14); and

sending the translated communication via the VPN to a remote transparent VPN service (VPN gateway or router; transparent secure data communication between end users, col. 7 lines 1-3), which manages VPN traffic (It is intrinsic property of a gateway facilitate and control traffic) for the remote client (transmits the configuration parameters to the virtual private network gateways affected by the command, so that the virtual private network gateways are configured to implement the command, col. 3 lines 19-22).

7. **As per claim 2**, Liu teaches the method further comprising, processing the method as a local transparent VPN service (VPN gateway or router; transparent secure data communication between end users, col. 7 lines 1-3), which manages VPN traffic (It is intrinsic property of a gateway facilitate and control traffic) for the local client (transmits the configuration parameters to the virtual private network gateways affected by the command, so that the virtual private network gateways are configured to implement the command, col. 3 lines 19-22).

8. **As per claims 3, 11, 19 and 22**, Liu teaches the method or the VPN managing system (method and apparatus for managing a virtual private network, abstract lines 1-2) wherein receiving further includes intercepting the communication issued from the local client by using a router or switch, wherein the local client directs the communication to the remote client via the

communication port and the router or switch (router) relays the communication to the processing of the method (col. 5 lines 60-65, col. 6 lines 37-45).

9. **As per claims 4 and 13**, Liu teaches the method further comprising, managing additional communications associated with the VPN from one or more different local clients (Headquarters LAN with endstations, col. 5 lines 62-64) which are directed between one or more different remote clients (remote clients 140 and 150, col. 6 line 10), wherein the remote transparent VPN service (VPN gateways, col. 5 lines 54-55) manages the additional communications (using a router, col. 5 lines 61) on behalf of the one or more different remote clients (col. 6 lines 10 - 20).

10. **As per claims 6, 14 and 18**, Liu teaches the method or the VPN managing system wherein receiving the communication further includes receiving the communication in at least one of a File Transfer Protocol (FTP) format and a Transmission Control Protocol (TCP) format (non-HTTP) (col. 11 lines 45 - 55).

11. **As per claims 7, 9 and 17**, Liu teaches the method or the VPN managing system further comprising, communication with the remote transparent VPN service over the insecure network via Secure Sockets Layer (SSL) or Transparent Layer Security (TLS) (col. 11 lines 45-55).

12. **As per claim 8**, Liu teaches a method for managing Virtual Private Network (VPN) (method for managing a virtual private network, abstract lines 1-2) communications, comprising: receiving a communication (receiving a command, abstract lines 8-9) from a local client (Headquarters LAN, col. 5 lines 60-64) which is directed to a remote client (remote clients, col. 6 lines 10-12) associated with a VPN; and inspecting the communication for determining whether the communication is a request for data that resides in a local cache (determining whether or not the source and destination addresses for

the data packets are both members of the same VPN group, where the determination may be made with reference to lookup tables that are maintained by the VPN gateways or by referencing to other memory mechanisms (SRAM, DRAM, RAM, etc.). This state may be thought of as member filtering for data packets being transmitted between the particular site and the VPN gateway which services it, col. 7 lines 23-30), and if so, delivering the data (configuration parameters, col. 3 lines 19-22) to the local client (col. 3 lines 19-22), and if not, locating a remote transparent VPN service associated with the VPN (VPN gateway or router; transparent secure data communication between end users, col. 7 lines 1-3), and wherein the communication is translated into formats (FTP or TCP, col. 11. lines 46-55) used by the VPN (translates the command into configuration parameters for virtual private network gateways affected by the command, col. 3 lines 12-14) and sent securely over an insecure network (private data network such as internet, col. 2 line 17-18, Fig. 1) to the remote transparent VPN service for delivery to the remote client (It is an intrinsic property of VPN to provide communication between remote nodes).

13. **As per claim 10**, Liu teaches the method of claim 8 wherein inspecting further includes identifying the remote transparent VPN service (VPN gateway or router; transparent secure data communication between end users, col. 7 lines 1-3) as a service which is managing VPN traffic (It is intrinsic property of a gateway facilitate and control traffic) for the remote client (transmits the configuration parameters to the virtual private network gateways affected by the command, so that the virtual private network gateways are configured to implement the command, col. 3 lines 19-22).

14. **As per claim 12**, Liu teaches the method of claim 8 further comprising:

receiving a response (communication receiving a command, abstract lines 8-9) from the remote client (remote clients, col. 6 lines 10-12) via the remote transparent VPN service (VPN gateway or router; transparent secure data communication between end users, col. 7 lines 1-3), if the communication had been sent via the VPN because it could not be satisfied from the local cache;

translating the response based on the formats of the VPN (translates the command into configuration parameters for virtual private network gateways affected by the command, col. 3 lines 12-14); and

delivering the translated response to the local client (transmits the configuration parameters to the virtual private network gateways affected by the command, so that the virtual private network gateways are configured to implement the command, col. 3 lines 19-22).

15. **As per claims 15 and 20**, Liu teaches the method and the VPN managing system further comprising, interacting with the transparent VPN service with mutually signed certificated that a exchanges between the method and the remote transparent VPN service during the interactions (col. 12 lines 5-10).

16. **As per claim 16**, Liu teaches a Virtual Private Network (VPN) managing system (apparatus for managing a virtual private network, abstract lines 1-2), comprising:

a remote transparent VPN service (VPN Gateway 145, 155, Fig. 1); and

a local transparent VPN service (VPN Gateway 115, Fig. 1), wherein local transparent VPN service intercepts and manages VPN traffic (It is intrinsic property of a gateway facilitate and control traffic) on behalf of one or more local clients (three endstations 111, 112, 113, col. 5

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lines 62-63) and services communications of those local clients with data in a local cache (determining whether or not the source and destination addresses for the data packets are both members of the same VPN group, where the determination may be made with reference to lookup tables that are maintained by the VPN gateways or by referencing to other memory mechanisms. This state may be thought of as member filtering for data packets being transmitted between the particular site and the VPN gateway which services it, col. 7 lines 23-30) (According to dictionary.com: cache is a RAM memory that is set aside as a specialized buffer storage that is continually updated; used to optimize data transfers between system elements with different characteristic), if available, and if the data is not available in the local cache, the local transparent VPN service transmits the communications securely to the remote transparent VPN service for delivery and servicing by one or more remote clients (It is an intrinsic property of VPN to provide communication between remote nodes) which the remote transparent VPN service manages.

17. **As per claim 21**, Liu teaches a Virtual Private Network (VPN) managing system (apparatus for managing a virtual private network, abstract lines 1-2), comprising:
a communication port (It is inherent for a communication system to have a port in order to send and receive data); and
a local transparent VPN service (VPN Gateway 115, Fig. 1), wherein VPN communications directed to the communication port (TCP or UDP ports for to send or receive data) are relayed to the local transparent VPN service, the local transparent VPN service attempts to service the VPN communications from local cache (determining whether or not the source and destination addresses for the data packets are both members of the same VPN group, where the

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determination may be made with reference to lookup tables that are maintained by the VPN gateways or by referencing to other memory mechanisms (SRAM, DRAM, RAM, etc.). This state may be thought of as member filtering for data packets being transmitted between the particular site and the VPN gateway which services it, col. 7 lines 23-30) and if attempts fail, the local transparent VPN service securely communicates with a remote transparent VPN service (It is an intrinsic property of VPN to provide communication between remote nodes) via an insecure network (private data network such as internet, col. 2 line 17-18, Fig. 1) to service the VPN communications.

18. **As per claim 23**, Liu teaches the VPN managing system of claim 21, wherein the system resides on a server and services a plurality of local clients associated with the VPN communications (col. 6 lines 28-34; col. 8 lines 45-60).

19. **As per claim 24**, Liu teaches the VPN managing system of claim 21 wherein the system resides on a single client (col. 6 lines 28-34; col. 8 lines 45-60).

20. **As per claim 25**, Liu teaches the VPN managing system of claim 21 wherein the local transparent VPN service (VPN gateways, col. 5 lines 54-55) translates (translates the command into configuration parameters for virtual private network gateways affected by the command, col. 3 lines 12-14) and services the VPN communications on behalf of a one or more of local clients (It is an intrinsic property of a gateway to act as an interface between two or more networks to connect dissimilar communications systems and transfer data. A gateway translates from one set of protocols to another).

21. **As per claim 26**, Liu teaches the VPN managing system of claim 25 wherein the remote transparent VPN service (VPN gateways, col. 5 lines 54-55) translates (translates the command

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into configuration parameters for virtual private network gateways affected by the command, col. 3 lines 12-14) and service the VPN communication on behalf of a one or more of remote clients (It is an intrinsic property of a gateway to act as an interface between two or more networks to connect dissimilar communications systems and transfer data. A gateway translates from one set of protocols to another).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu (US 6079020 dated 06/20/2000) in further view of Mangan (US 20030149787 dated 08/07/2003).

24. Liu teaches a method and apparatus for managing a virtual network operating over a public data network which include a plurality of virtual private network gateways so that the communications across the virtual private network are channeled through the virtual private network gateways (abstract lines 1-7). Liu does not teach caching of data received from the remote transparent VPN service in a local cache for accelerated delivery to the local client.

However, Mangan teaches a specific cache appliance 26 used to implement rapid retrieval of content thus shortening the waiting time for delivery of content to the ENP users. This increases user satisfaction, and reduces the traffic demand on public and private networks [0053].

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It would have been obvious to one of ordinary skill in the art to substitute caching data of Mangan for the VPN managing system of Liu because Mangan teaches use of caching reduces traffic on public and private network as the waiting time for the delivery of the content shortens [0053].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Supriya Ahuja whose telephone number is 571-270-1588. The examiner can normally be reached on Monday - Thursday 9:30 -7:00; 2nd Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Supriya Ahuja

S.A.

June 19, 2007


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